

CLAIMS:

A safety arrangement for a motor vehicle, the safety arrangement comprising sensor means in the form of at least one sensor adapted to sense a parameter indicative of an accident situation, and a control system controlling a triggering circuit, the control system incorporating at least one processor connected to the sensor means and to the triggering circuit, the processor having an input pin for activating a non-maskable interrupt (NMI) routine, the triggering circuit being adapted to actuate or deploy a safety device in response to a predetermined command generated by the processor in response to a predetermined output from the sensor means, said command generated by the processor creating an input to the said input pin of the processor to start said NMI routine, said NMI routine serving to determine whether there are hardware and/or software faults that may invalidate the command, and to interrupt actuation or deployment of the safety device if any such fault is detected.

2. An arrangement according to Claim 1 wherein the sensor comprises at least one accelerometer.

3. An arrangement according to Claim 2 wherein the sensor comprises a first accelerometer and a second accelerometer.

4. An arrangement according to any one of the preceding Claims wherein there are two separate connections between the micro-processor and the triggering circuit so that a safety device will only be actuated or deployed if appropriate signals are provided on both said connections.

5. An arrangement according to Claim 4 wherein one connection is provided to send high level commands comprising a plurality of digital words with the other connection sending a low level command.

6. An arrangement according to Claim 4 or 5 wherein one of the connections is connected to said input pin.

7. An arrangement according to Claim 6 as dependent on Claim 5 wherein the second connection which provides a low level command is the connection connected to the said input pin.

8. An arrangement according to any one of the preceding Claims wherein the micro-processor is adapted to form a safeing algorithm to generate a signal indicating the possibility of an accident, and means to perform a crash algorithm adapted to provide a signal indicating that an accident has occurred.

9. An arrangement according to Claim 8 as dependent upon Claim 5 wherein both the low level and the high level connections are controlled by the crash algorithm, a terminal command on the high level connection being sent only after the said diagnostic routine has been completed.

10. An arrangement according to any one of Claims 1 to 9 in combination with a safety device.

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